

ABSTRACT

An apparatus and method are described for real-time buying and selling of bandwidth at differentiated quality of service levels, routing of excess traffic over the bandwidth purchased in real time, and billing and settlement of the transactions. In the present invention, a network user buys bandwidth to have a fixed capacity level. When the current traffic level exceeds the fixed capacity level, the network user buys additional capacity in real time as needed to handle the overflow. In addition, when the fixed capacity level exceeds the current traffic level, the network user can sell the excess capacity as available. Further, network users can select among a number of response times. The response times, which can be guaranteed, allow all traffic to be delivered within a time limit, or set time limits within which different types of data can be delivered.